


[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide

 Searching within **The ACM Digital Library** for: application partitioning VMM ([start a new search](#))

 Found **76** of **270,768**

REFINE YOUR SEARCH

Refine by Keywords

[Discovered Terms](#)

Refine by People

[Names](#)

[Institutions](#)

[Authors](#)

[Reviewers](#)

Refine by Publications

[Publication Year](#)

[Publication Names](#)

[ACM Publications](#)

[All Publications](#)

[Content Formats](#)

[Publishers](#)

Refine by Conferences

[Sponsors](#)

[Events](#)

[Proceeding Series](#)

ADVANCED SEARCH

[Advanced Search](#)

FEEDBACK

[Please provide us with feedback](#)

 Found **76** of **270,768**

[Search Results](#) •
 [Related Journals](#) •
 [Related Magazines](#) •
 [Related SIGs](#) •
 [Related Conferences](#)

Results 1 - 20 of 76

[Save results to a Binder](#)

Sort by in

 Result page: 1 2 3 4 [next](#) [>>](#)

1 [Interactive resource-intensive applications made easy](#)

[H. Andrés Lagar-Cavilla](#), [Niraj Tolia](#), [Eyal de Lara](#), [M. Satyanarayanan](#), [David O'Hallaron](#)

November 2007 **Middleware '07: Proceedings of the ACM/IFIP/USENIX 2007 International Conference on Middleware**

Publisher: Springer-Verlag New York, Inc.

Full text available: [Pdf](#) (3.83 MB)

Additional Information: [full citation](#), [abstract](#), [references](#)

Bibliometrics: Downloads (6 Weeks): 7, Downloads (12 Months): 43, Downloads (Overall): 43, Citation Count: 2

Snowbird is a middleware system based on virtual machine (VM) technology that simplifies the development and deployment of *bimodal* applications. Such applications alternate between phases with heavy computational-resource needs and phases rich ...

Keywords: bimodal applications, interactive response, migration, thin clients, variable thickness, virtual machines

2 [Slingshot: deploying stateful services in wireless hotspots](#)

[Ya-Yunn Su](#), [Jason Flinn](#)

June 2005 **MobiSys '05: Proceedings of the 3rd international conference on Mobile systems, applications, and services**

Publisher: ACM [Request Permissions](#)

Full text available: [Pdf](#) (304.65 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Bibliometrics: Downloads (6 Weeks): 20, Downloads (12 Months): 57, Downloads (Overall): 568, Citation Count: 2

Given a sufficiently good network connection, even a handheld computer can run extremely resource-intensive applications by executing the demanding portions on a remote server. At first glance, the increasingly ubiquitous deployment of wireless hotspots ...

3 [Proceedings of the 45th annual Design Automation Conference](#)

[Limor Fix](#)

June 2008 **DAC '08: Proceedings of the 45th annual Design Automation Conference**


Publisher: ACM

Additional Information: [full citation](#), [abstract](#)

Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

Welcome to the 45th Design Automation Conference and the City of Anaheim! DAC is the premier event for the electronic design community. It offers the industry's most prestigious technical conference in combination with the biggest exhibition. DAC is ...





4 [Overshadow: a virtualization-based approach to retrofitting protection in commodity operating systems](#)

 [Xiaoxin Chen](#), [Tal Garfinkel](#), [E. Christopher Lewis](#), [Pratap Subrahmanyam](#), [Carl A. Waldspurger](#), [Dan Boneh](#), [Jeffrey Dvoskin](#), [Dan R.K. Ports](#)

March 2008 **ASPLOS XIII: Proceedings of the 13th international conference on Architectural support for programming languages and operating systems**

Publisher: ACM  [Request Permissions](#)

Additional Information: [full citation](#),
[appendices](#)
[and](#)
[supplements](#),
[abstract](#),
[references](#),
[cited by](#),
[index terms](#)

Full text available:  [AVI](#) (27:48 MIN),  [FLV](#) (27:0 MIN),  [MP3](#) (27:49 MIN),  [PDF](#) (272.32 KB)

Bibliometrics: Downloads (6 Weeks): 44, Downloads (12 Months): 381, Downloads (Overall): 841, Citation Count: 7

Commodity operating systems entrusted with securing sensitive data are remarkably large and complex, and consequently, frequently prone to compromise. To address this limitation, we introduce a virtual-machine-based system called Overshadow that protects ...

Keywords: VMM, cloaking, hypervisors, memory protection, multi-shadowing, operating systems, virtual machine monitors


Also published in:

March 2008 **SIGARCH Computer Architecture News** Volume 36 Issue 1

March 2008 **SIGOPS Operating Systems Review** Volume 42 Issue 2


March 2008 **SIGPLAN Notices** Volume 43 Issue 3

5 [Splitting interfaces: making trust between applications and operating systems configurable](#)

 [Richard Ta-Min](#), [Lionel Litty](#), [David Lie](#)

November 2006 **OSDI '06: Proceedings of the 7th symposium on Operating systems design and implementation 2006**

Publisher: USENIX Association


Full text available:  [PDF](#) (387.24 KB)

Additional Information: [full citation](#), [abstract](#), [references](#)

Bibliometrics: Downloads (6 Weeks): 4, Downloads (12 Months): 51, Downloads (Overall): 154, Citation Count: 4


In current commodity systems, applications have no way of limiting their trust in the underlying operating system (OS), leaving them at the complete mercy of an attacker who gains control over the OS. In this work, we describe the design and implementation ...

6 [Agile dynamic provisioning of multi-tier Internet applications](#)

 [Bhuvan Ugaonkar](#), [Prashant Shenoy](#), [Abhishek Chandra](#), [Pawan Goyal](#), [Timothy Wood](#)

March 2008 **Transactions on Autonomous and Adaptive Systems (TAAS)**, Volume 3 Issue 1

Publisher: ACM  [Request Permissions](#)

Full text available:  [PDF](#) (1.17 MB)


Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Bibliometrics: Downloads (6 Weeks): 31, Downloads (12 Months): 245, Downloads (Overall): 515, Citation Count: 1



Dynamic capacity provisioning is a useful technique for handling the multi-time-scale variations seen in Internet workloads. In this article, we propose a novel dynamic provisioning technique for multi-tier Internet applications that employs (1) a flexible ...

Keywords: Internet application, dynamic provisioning

7 [Queue: Volume 6 Issue 1](#)

 January 2008

Publisher: ACM

Full text available:  [Digital Edition](#),  [PDF](#) (6.04 MB)

Additional Information: [full citation](#), [index terms](#)

Bibliometrics: Downloads (6 Weeks): 45, Downloads (12 Months): 206, Downloads (Overall): 536, Citation Count: 0

8 [Flexible security configuration for virtual machines](#)[Sandra Rueda, Yogesh Sreenivasan, Trent Jaeger](#)October 2008 **CSAW '08: Proceedings of the 2nd ACM workshop on Computer security architectures****Publisher:** ACM [Request Permissions](#)Full text available: Pdf (517.78 KB) **Additional Information:** [full citation](#), [abstract](#), [references](#), [index terms](#)**Bibliometrics:** Downloads (6 Weeks): 15, Downloads (12 Months): 215, Downloads (Overall): 264, Citation Count: 0

Virtual machines are widely accepted as a promising basis for building secure systems. However, while virtual machines offer effective mechanisms to create isolated environments, mechanisms that offer controlled interaction among VMs are immature. Some ...

Keywords: access control, compliance, policy, virtual machines9 [Processor virtualization for secure mobile terminals](#)[Hiroaki Inoue, Junji Sakai, Masato Edahiro](#)July 2008 **Transactions on Design Automation of Electronic Systems (TODAES)**, Volume 13 Issue 3**Publisher:** ACM [Request Permissions](#)Full text available: Pdf (1.53 MB) **Additional Information:** [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)**Bibliometrics:** Downloads (6 Weeks): 31, Downloads (12 Months): 266, Downloads (Overall): 428, Citation Count: 1

We propose a processor virtualization architecture, VIRTUS, to provide a dedicated domain for preinstalled applications and virtualized domains for downloaded native applications. With it, security-oriented next-generation mobile terminals can provide ...

Keywords: Multiprocessor, processor virtualization10 [Improving application security with data flow assertions](#)[Alexander Yip, Xi Wang, Nikolai Zeldovich, M. Frans Kaashoek](#)October 2009 **SOSP '09: Proceedings of the ACM SIGOPS 22nd symposium on Operating systems principles****Publisher:** ACM [Request Permissions](#)Full text available: Pdf (571.52 KB) **Additional Information:** [full citation](#), [abstract](#), [references](#), [index terms](#)**Bibliometrics:** Downloads (6 Weeks): 37, Downloads (12 Months): 100, Downloads (Overall): 100, Citation Count: 0

Resin is a new language runtime that helps prevent security vulnerabilities, by allowing programmers to specify application-level data flow assertions. Resin provides policy objects, which programmers use to specify assertion code and metadata; data ...

Keywords: php, privacy, python, security, sql injection, web, xss11 [Towards end-to-end quality of service: controlling I/O interference in shared storage servers](#)[Gokul Soundararajan, Cristiana Amza](#)December 2008 **Middleware '08: Proceedings of the 9th ACM/IFIP/USENIX International Conference on Middleware****Publisher:** Springer-Verlag New York, Inc.Full text available: Pdf (3.70 MB) **Additional Information:** [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)**Bibliometrics:** Downloads (6 Weeks): 2, Downloads (12 Months): 85, Downloads (Overall): 85, Citation Count: 1

Due to the imperative need to reduce the costs of management, power and cooling in large data centers, operators multiplex several concurrent applications on each physical server of a server farm connected to a shared network attached storage. Determining ...

12 [Communications of the ACM: Volume 51 Issue 12](#)

December 2008

Communications of the ACM

Publisher: ACM

Full text available: Digital Edition , Pdf (6.91 MB)

Additional Information: [full citation](#), [index terms](#)**Bibliometrics:** Downloads (6 Weeks): 471, Downloads (12 Months): 3165, Downloads (Overall): 3955, Citation Count: 0**13** [CacheScouts: Fine-Grain Monitoring of Shared Caches in CMP Platforms](#)[Li Zhao](#), [Ravi Iyer](#), [Ramesh Illikkal](#), [Jaideep Moses](#), [Srihari Makineni](#), [Don Newell](#)September 2007 **PACT '07: Proceedings of the 16th International Conference on Parallel Architecture and Compilation Techniques****Publisher:** IEEE Computer Society

Full text available: Pdf (501.98 KB)

Additional Information: [full citation](#), [abstract](#), [index terms](#)**Bibliometrics:** Downloads (6 Weeks): 10, Downloads (12 Months): 44, Downloads (Overall): 201, Citation Count: 4

As multi-core architectures flourish in the marketplace, multi-application workload scenarios (such as server consolidation) are growing rapidly. When running multiple applications simultaneously on a platform, it has been shown that contention for shared ...

14 [QoS policies and architecture for cache/memory in CMP platforms](#)[Ravi Iyer](#), [Li Zhao](#), [Fei Guo](#), [Ramesh Illikkal](#), [Srihari Makineni](#), [Don Newell](#), [Yan Solihin](#), [Lisa Hsu](#), [Steve Reinhardt](#)June 2007 **SIGMETRICS '07: Proceedings of the 2007 ACM SIGMETRICS international conference on Measurement and modeling of computer systems****Publisher:** ACM

Full text available: Pdf (459.91 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)**Bibliometrics:** Downloads (6 Weeks): 19, Downloads (12 Months): 199, Downloads (Overall): 960, Citation Count: 16

As we enter the era of CMP platforms with multiple threads/cores on the die, the diversity of the simultaneous workloads running on them is expected to increase. The rapid deployment of virtualization as a means to consolidate workloads on to a single ...

Keywords: CMP, QoS, cache/memory, performance, quality of service, resource sharing principles, service level agreements

Also published in:

June 2007 **SIGMETRICS Performance Evaluation Review** Volume 35 Issue 1**15** [Terra: a virtual machine-based platform for trusted computing](#)[Tai Garfinkel](#), [Ben Pfaff](#), [Jim Chow](#), [Mendel Rosenblum](#), [Dan Boneh](#)December 2003 **SOSP '03: Proceedings of the nineteenth ACM symposium on Operating systems principles****Publisher:** ACM

Full text available: Pdf (140.31 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)**Bibliometrics:** Downloads (6 Weeks): 52, Downloads (12 Months): 485, Downloads (Overall): 3509, Citation Count: 94


We present a flexible architecture for trusted computing, called Terra, that allows applications with a wide range of security requirements to run simultaneously on commodity hardware. Applications on Terra enjoy the semantics of running on a separate, ...

Keywords: VMM, attestation, authentication, trusted computing, virtual machine, virtual machine monitor

Also published in:


December 2003 **SIGOPS Operating Systems Review** Volume 37 Issue 5

16 [From chaos to QoS: case studies in CMP resource management](#)

 [Fei Guo](#), [Hari Kannan](#), [Li Zhao](#), [Ramesh Illikkal](#), [Ravi Iyer](#), [Don Newell](#), [Yan Solihin](#), [Christos Kozyrakis](#)

March 2007 **SIGARCH Computer Architecture News**, Volume 35 Issue 1

Publisher: ACM


Full text available:  [Pdf](#) (503.77 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)

Bibliometrics: Downloads (6 Weeks): 9, Downloads (12 Months): 59, Downloads (Overall): 298, Citation Count: 2


As more and more cores are enabled on the die of future CMP platforms, we expect that several diverse workloads will run simultaneously on the platform. A key example of this trend is the growth of virtualization usage models. When multiple virtual machines ...

17 [Flicker: an execution infrastructure for tcb minimization](#)

 [Jonathan M. McCune](#), [Bryan J. Parno](#), [Adrian Perrig](#), [Michael K. Reiter](#), [Hiroshi Isozaki](#)

April 2008 **Eurosys '08: Proceedings of the 3rd ACM SIGOPS/EuroSys European Conference on Computer Systems 2008**

Publisher: ACM

Full text available:  [Pdf](#) (322.80 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Bibliometrics: Downloads (6 Weeks): 20, Downloads (12 Months): 173, Downloads (Overall): 430, Citation Count: 12


We present Flicker, an infrastructure for executing security-sensitive code in complete isolation while trusting as few as 250 lines of additional code. Flicker can also provide meaningful, fine-grained attestation of the code executed (as well as its ...

Keywords: late launch, secure execution, trusted computing

Also published in:


April 2008 **SIGOPS Operating Systems Review** Volume 42 Issue 4

18 [VMM-based hidden process detection and identification using Lycosid](#)

 [Stephen T. Jones](#), [Andrea C. Arpaci-Dusseau](#), [Remzi H. Arpaci-Dusseau](#)

March 2008 **VEE '08: Proceedings of the fourth ACM SIGPLAN/SIGOPS international conference on Virtual execution environments**

Publisher: ACM 

Full text available:  [Pdf](#) (312.93 KB)


Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Bibliometrics: Downloads (6 Weeks): 5, Downloads (12 Months): 183, Downloads (Overall): 445, Citation Count: 7

Use of stealth rootkit techniques to hide long-lived malicious processes is a current and alarming security issue. In this paper, we describe, implement, and evaluate a novel VMM-based hidden process detection and identification service called Lycosid ...


Keywords: inference, security, virtual machine

19 [Rate-based QoS techniques for cache/memory in CMP platforms](#)

 [Andrew Herdrich](#), [Ramesh Illikkal](#), [Ravi Iyer](#), [Don Newell](#), [Vineet Chadha](#), [Jaideep Moses](#)

June 2009 **ICS '09: Proceedings of the 23rd international conference on Supercomputing**

Publisher: ACM 

Full text available:  [Pdf](#) (633.50 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Bibliometrics: Downloads (6 Weeks): 20, Downloads (12 Months): 128, Downloads (Overall): 128, Citation Count: 0

As we embrace the era of chip multi-processors (CMP), we are faced with two major architectural challenges: (i) QoS or performance management of disparate applications running on CPU cores contending for shared cache/memory resources and (ii) global/local ...

Keywords: cache, clock gating, dvfs, frequency scaling, memory, p-states, performance differentiation, qos, rate control, t-states

20 [Devirtualizable virtual machines enabling general, single-node, online maintenance](#)



David E. Lowell, Yasushi Saito, Eileen J. Samberg

December 2004 **ASPLOS-XI** : Proceedings of the 11th international conference on Architectural support for programming languages and operating systems

Publisher: ACM [Request Permissions](#)

Full text available: Pdf (174.01 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)

Bibliometrics: Downloads (6 Weeks): 11, Downloads (12 Months): 107, Downloads (Overall): 1148, Citation Count: 8

Maintenance is the dominant source of downtime at high availability sites. Unfortunately, the dominant mechanism for reducing this downtime, cluster rolling upgrade, has two shortcomings that have prevented its broad acceptance. First, cluster-style ...

Keywords: availability, online maintenance, planned downtime, virtual machines

Also published in:

November 2004 **SIGPLAN Notices**

Volume 39 Issue 11

December 2004 **SIGOPS Operating Systems Review**

Volume 38 Issue 5

December 2004 **SIGARCH Computer Architecture News** Volume 32 Issue 5

Result page: [1](#) [2](#) [3](#) [4](#) [next](#)
[»»](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2010 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:



[Adobe Acrobat](#)



[QuickTime](#)



[Windows Media Player](#)



[Real Player](#)